

Name of Practice: VOLUNTARY AGRICULTURAL SINKHOLE PROTECTION
DCR Specifications for No. VWQ-11

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's voluntary agricultural sinkhole protection best management practice, that are applicable to all contracts, entered into with respect to that practice.

A. Description and Purpose

This practice will provide a protection method to improve groundwater quality from surface contamination.

The purpose of this practice is to improve water quality by removing sources of pollution from sinkholes and providing an adequate buffer to trap and filter sediments and nutrients from surface flows that enter the groundwater through sinkholes.

B. Policies and Specifications

1. This practice may contain:
 - i. Measures to remove and properly dispose of all foreign materials and debris dumped in and around sinkholes.
 - ii. Structural and agronomic measures to provide adequate vegetation for filtering and sediment trapping of surface run off.
 - iii. Fencing in order to provide livestock exclusion and personal safety in these areas.
2. Consideration should be given to wildlife, any rare, threatened and/or endangered species (federal or state), and enhancing the appearance of the area when establishing the protective measures.
3. Site geology and hydrology must be considered in planning and installing component practices. Any openings such as swallets or cave entrances encountered with the installation of this practice will be documented and reported to The Department of Conservation and Recreation Division of Natural Heritage.
4. All debris (except biodegradable woody debris, rocks, and other mineral matter) removed from the sinkhole will be transported off site and disposed of in an environmentally safe manner. Should any hazardous material be anticipated or found during construction, local officials dealing with hazardous materials must be notified. Prevention methods, such as on site "over pack" drums, may be required if hazardous materials are known to exist at the site.
5. Once established, no additional debris or material can be placed within the sinkhole proper or within 50 feet of the drainage ways leading into the sinkhole. Deposition of any foreign material will violate the life span requirements of this standard.

6. All land disturbance activity will be adequately stabilized with appropriate vegetation as part of this clean up effort. Appropriate vegetation will include, whenever possible, native grasses and shrubs.
7. This practice is subject to NRCS Standard 500 Obstruction Removal, 342 Critical Area Planting, 362 Diversion, 390 Riparian Herbaceous Buffer, 391 Riparian Forest Buffer, 393 Filter Strip, 472 Access Control, and 612 Tree and Shrub Establishment.
8. All practice components implemented should be maintained for a minimum of 5 years following the calendar year of certification of completion. This practice is subject to spot check by the SWCD throughout the lifespan of the practice.
9. Soil loss rates must be computed for all applications.
10. The practice must not be in lifespan from any other conservation program.

C. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and SWCD staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above, and/or Engineering Job Approval Authority (EJAA), for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

Revised March, 2016